**Table 3: Bi-variable linear regression, age-adjusted estimates of the association between log of blood lead level and other study variables, Philadelphia, 2014 (N=104)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Exposure variable** | **N** | **Geometric**  **Mean\* BLL (95% CI)** | **Beta (SE)** | **Ratio of geometric means (95% CI)** | ***p* Value** |
| Age, years (continuous) | 104 | 1.95 (1.67, 2.32) | -0.01 (0.04) | N/A | 0.8416 |
| Child gender  Female  Male | 54  47 | 1.90 (1.48, 2.41)  2.25 (1.80, 2.77) | 0.17 (0.17) | 1.19 (0.85, 1.65) | 0.3028 |
| Yard soil lead content  ≥400 ppm (µg/g)  <400 ppm (µg/g) | 38  22 | 2.39 (1.86, 3.10)  1.62 (1.17, 2.20) | 0.40 (0.20) | 1.49 (0.99, 2.23) | 0.0539 |
| Dust floor (front door) lead content  ≥ 40 µg/ft²  < 40 µg/ft² | 25  63 | 2.83 (2.03, 3.94)  1.67 (1.35, 2.05) | 0.53 (0.20) | 1.70 (1.15, 2.51) | 0.0079 |
| Dust floor (child play area) lead content  ≥ 40 µg/ft²  < 40 µg/ft² | 23  45 | 2.59 (1.93, 3.46)  2.39 (1.90, 3.00) | 0.09 (0.19) | 1.09 (0.75, 1.58) | 0.6459 |
| Dust window (child room) lead content  ≥ 250 µg/ft²  < 250 µg/ft² | 14  67 | 2.89 (1.90, 4.39)  1.95 (1.60, 2.39) | 0.39 (0.24) | 1.48 (0.91, 2.36) | 0.1082 |
| Distance to point source, quartiles (feet)  < 2302  2303-3738  3739-5122  > 5122 | 20  27  29  30 | 1.39 (0.85, 2.27)  1.82 (1.46, 2.25)  2.44 (1.70, 3.52)  2.16 (1.68, 2.75) | -0.44 (0.28)  0.17 (0.16)  0.13 (0.22)  ref | 0.64 (0.37, 1.13)  1.19 (0.62, 1.16)  1.14 (0.73, 1.77)  ref | 0.1209  0.3002  0.5661  ref |
| Year built  <1900  ≥1900 | 23  83 | 2.72 (2.10, 3.53)  1.80 (1.48, 2.18) | 0.41 (0.17) | 1.51 (1.08, 2.10) | 0.0151 |
| Ownership type  Rental/public housing/Section 8  Owned | 52  50 | 2.29 (1.92, 2.75)  1.60 (1.21, 2.12) | 0.37 (0.17) | 1.45 (1.03, 2.01) | 0.0327 |
| Exterior paint condition of household  Intact  Peeling, chipping, cracking and/or chalking | 82  13 | 1.77 (1.49, 2.10)  3.10 (2.01, 4.71) | 0.56 (0.23) | 1.75 (1.09, 2.77) | 0.0187 |
| Exterior paint condition of windows  Intact  Peeling, chipping, cracking | 75  19 | 1.79 (1.51, 2.12)  2.27 (1.42, 3.63) | 0.24 (0.25) | 1.27 (0.77, 2.10) | 0.3438 |
| Interior paint condition of household  Intact  Peeling, chipping, cracking | 80  16 | 1.72 (1.43, 2.03)  3.10 (2.29, 4.14) | 0.59 (0.18) | 1.80 (1.27, 2.56) | 0.0010 |
| Mother’s education  < high school diploma/GED  ≥ high school | 16  81 | 2.86 (2.12, 3.90)  1.72 (1.40, 2.08) | 0.52 (0.18) | 1.68 (1.17, 2.41) | 0.0053 |
| Child plays outside house  Yes  No | 93  8 | 1.95 (1.63, 2.34)  1.73 (1.13, 2.66) | 0.11 (0.24) | 1.12 (0.71, 1.79) | 0.6278 |
| Interior of house painted  Every 2 years or less  Every 2+ years | 21  57 | 1.97 (1.60, 2.44)  1.57 (1.00, 2.48) | -0.23 (0.25) | 0.79 (0.48, 1.31) | 0.3667 |
| Exterior of house painted  Every 5 years or less  Never | 20  28 | 1.90 (1.31, 2.75)  2.05 (1.45, 2.94) | 0.08 (0.27) | 1.08 (0.64, 1.84) | 0.7682 |
| Household renovated during previous six months  Yes  No | 23  72 | 2.48 (1.92, 3.19)  1.63 (1.32, 2.00) | 0.42 (0.17) | 1.52 (1.08, 2.12) | 0.0146 |
| Evidence of car repair or machinery work in yard  Yes  No | 3  32 | 1.72 (1.11, 2.69)  1.95 (1.65, 2.34) | -0.13 (0.25) | 0.88 (0.53, 1.45) | 0.6074 |
| Household cleaning  Daily  Weekly or monthly | 57  45 | 2.45 (1.99, 3.00)  1.42 (1.11, 1.82) | -0.55 (0.17) | 0.58 (0.42, 0.80) | 0.0013 |
| Any plates, bowls, or food storage containers made of ceramic or earthenware  Yes  No | 29  67 | 2.08 (1.60, 2.66)  1.93 (1.54, 2.44) | 0.07 (0.18) | 1.07 (0.76, 1.52) | 0.6946 |
| Lead hobby of anyone in household  Yes  No | 11  88 | 2.48 (1.43, 4.31)  1.88 (1.55, 2.25) | 0.28 (0.29) | 1.32 (0.74, 2.39) | 0.3376 |
| Lead occupation of anyone in household  Yes  No | 18  31 | 2.10 (1.45, 3.03)  1.52 (1.13, 2.05) | 0.32 (0.24) | 1.38 (0.85, 2.20) | 0.1906 |
| Anyone smoke tobacco inside household  Yes  No | 19  79 | 2.56 (1.75, 3.74)  1.72 (1.43, 2.08) | 0.39 (0.21) | 1.48 (0.97, 2.27) | 0.0673 |
| Child washes hands before eating  Often  Sometimes, rarely or never | 70  32 | 2.05 (1.70, 2.51)  1.65 (1.17, 2.29) | -0.23 (0.20) | 0.79 (0.54, 1.85) | 0.2558 |
| Observation of child eating or mouthing non-food items  Yes  No | 73  32 | 2.08 (1.70, 2.53)  1.75 (1.31, 2.32) | 0.17 (0.17) | 1.18 (0.84, 1.67) | 0.3182 |
| Use of household remedies, herbal remedies or folk medicines  Yes  No | 5  96 | 1.31 (0.61, 2.86)  2.01 (1.70, 2.41) | -0.43 (0.4) | 0.65 (0.29, 1.45) | 0.2879 |
| Child has asthma symptoms such as shortness of breath, coughing, or wheezing  Yes  No | 25  78 | 2.85 (2.16, 3.73)  1.73 (1.43, 2.12) | 0.49 (0.17) | 1.63 (1.17, 2.29) | 0.0042 |
| Child has asthma (as told by a health care provider)  Yes  No | 16  87 | 3.60 (2.71, 4.80)  1.75 (1.46, 2.10) | 0.72 (0.17) | 2.05 (1.48, 2.86) | <0.001 |
| Child currently or ever received government-sponsored medical insurance  Yes  No | 42  61 | 2.53 (2.08, 3.06)  1.65 (1.29, 2.08) | 0.43 (0.15) | 1.53 (1.13, 2.10) | 0.0065 |
| Child currently or ever received food stamps  Yes  No | 46  57 | 2.61 (2.12, 3.19)  1.55 (1.22, 1.97) | 0.52 (0.16) | 1.68 (1.21, 2.31) | 0.0021 |
| Child currently or ever received Women Infant Children Program (WIC)  Yes  No | 36  67 | 2.56 (2.03, 3.19)  1.70 (1.36, 2.12) | 0.41 (0.16) | 1.51 (1.09, 2.05) | 0.0116 |

**\*Least Squares Mean (Conditional Marginal)**